

January 4, 2002

Mr. Ronald A. Milner, Chief Operating Officer
Office of Civilian Radioactive Waste Management
U. S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION'S OBSERVATION AUDIT
REPORT NO. OAR-02-02, "OBSERVATION AUDIT OF THE BECHTEL SAIC
COMPANY, LLC, AUDIT NO. BSC-SA-02-005 OF METAL SAMPLES COMPANY"

Dear Mr. Milner:

I am transmitting the U.S. Nuclear Regulatory Commission's (NRC's) Observation Audit Report (No. OAR-02-02) of the U.S. Department of Energy's (DOE's), Office of Civilian Radioactive Waste Management (OCRWM), Management and Operating Contractor, Bechtel SAIC Company, LLC (BSC), Quality Assurance (QA) audit of Metal Samples Company (Metal Samples). Metal Samples is a division of Alabama Specialty Products, Inc. This audit was conducted on November 26-28, 2001, at Metal Samples facilities in Oxford, Alabama.

The purpose of this audit was to evaluate the effectiveness of the implementation of Alabama Specialty Products, Inc.'s QA Manual and to determine if applicable requirements of the OCRWM Quality Assurance Program Description were being met.

The scope of the audit was to evaluate the effectiveness of the QA Program delineated in the TRW Environmental Safety Systems Purchase Orders A15414SS0B and A15382YS9B and evaluate the implementation of the Alabama Specialty Products Inc. Quality Manual, Revision 2/16/99 and associated Operational Procedures and Work Instructions, as relating to various sample preparations.

The NRC observers (hereafter observers) determined that this audit was effective in identifying potential deficiencies and recommending improvements for Metal Samples' activities reviewed. During the conduct of the audit, both the BSC audit team (hereafter audit team) and the observers reviewed applicable documents, procedures, and activities within the audit's scope.

The audit team identified three potential deficiencies in the areas of procurement, control of measuring and testing equipment, and nonconformance control. The staff believes that this BSC audit was well-planned, thorough, and adequately evaluated Metal Samples' QA activities.

The observers agreed with the audit team's conclusions, findings, and recommendations presented at the audit exit. The staff will continue to interface with OCRWM and follow the progress that Metal Samples is making to address the issues identified during this audit.

R. Milner

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A written response to this letter and the enclosed report is not required. If you have any questions, please contact Ted Carter at (301) 415-6684.

Sincerely,

/RA/

C. William Reamer, Chief
High-Level Waste Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Enclosure: NRC Observation Audit Report
No. OAR-02-02, "Observation Audit
of the Bechtel SAIC Company, LLC,
Audit No. BSC-SA-02-005 of Metal Samples Company"

CC: See attached list

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Letter to R. Milner from C.W. Reamer dated January 4, 2002

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S. Hanauer, DOE/Washington, DC	J. Shankle, Mineral County, NV
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N. Slater, DOE/Washington, DC	J. McKnight, Nye County, NV
A. Gil, YMPO	D. Weigel, GAO
R. Dyer, YMPO	W. Barnard, NWTRB
S. Brocoum, YMPO	R. Holden, NCAI
R. Davis, YMPO	A. Collins, NIEC
S. Mellington, YMPO	R. Arnold, Pahrump Paiute Tribe
C. Hanlon, YMPO	J. Larson, White Pine County
T. Gunter, YMPO	R. Clark, EPA
K. Hess, BSC	F. Marcinowski, EPA
D. Krisha, BSC	R. Anderson, NEI
S. Cereghina, BSC	R. McCullum, NEI
N. Williams, BSC	S. Kraft, NEI
M. Voegele, BSC/SAIC	J. Kessler, EPRI
R. Henning, BSC	D. Duncan, USGS
B. Price, Nevada Legislative Committee	R. Craig, USGS
J. Meder, Nevada Legislative Counsel Bureau	W. Booth, Engineering Svcs, LTD
I. Navis, Clark County, NV	J. Curtiss, Winston & Strawn
E. von Tiesenhausen, Clark County, NV	S. Echols
A. Kalt, Churchill County, NV	N. Rice, NV Congressional Delegation
G. McCorkell, Esmeralda County, NV	T. Story, NV Congressional Delegation
L. Fiorenzi, Eureka County, NV	J. Reynoldson, NV Congressional Delegation
A. Johnson, Eureka County, NV	S. Joya, NV Congressional Delegation
A. Remus, Inyo County, CA	J. Pegues, City of Las Vegas, NV
M. Yarbrow, Lander County, NV	L. Lehman, T-REG, Inc.

I. Zabarte, W.S.N.C.

C. Anderson, Las Vegas Paiute Tribe

J. Birchim, Yomba Shoshone Tribe

L. Jackson, Timbisha Shoshone Tribe

C. Meyers, Moapa Paiute Indian Tribe

V. Miller, Fort Independence Indian Tribe

A. Bacock, Big Pine Paiute Tribe of
the Owens Valley

R. Quintero, Inter-Tribal Council of Nevada
(Chairman, Walker River Paiute Tribe)

M. Bengochia, Bishop Paiute Indian Tribe

J. Egan, Egan & Associates, PLLC

R. Bahe, Benton Paiute Indian Tribe

C. Bradley, Kaibab Band of Southern Paiutes

R. Joseph, Lone Pine Paiute-Shoshone Tribe

L. Tom, Paiute Indian Tribes of Utah

E. Smith, Chemehuevi Indian Tribe

J. Charles, Ely Shoshone Tribe

D. Crawford, Inter-Tribal Council of Nevada

H. Blackeye, Jr., Duckwater Shoshone Tribe

D. Eddy, Jr. Colorado River Indian Tribes

J. Leeds, Las Vegas Indian Center

W. Briggs, Ross, Dixon & Bell

U.S. NUCLEAR REGULATORY COMMISSION
OBSERVATION AUDIT REPORT NO. OAR-02-02
"OBSERVATION AUDIT OF THE
BECHTEL SAIC COMPANY, LLC
AUDIT NO. BSC-SA-02-005 OF METAL SAMPLES COMPANY"

/RA/ 01/03/02
Ted Carter
Projects and Engineering Section
High-Level Waste Branch
Division of Waste Management

/RA/ 01/02/02
Thomas C. Trbovich
Center for Nuclear Waste Regulatory
Analyses

Reviewed and Approved by:

/RA/ 01/04/02
N. King Stablein, Chief
Projects and Engineering Section
High-Level Waste Branch
Division of Waste Management

1.0 INTRODUCTION

1.1 Metal Samples Company (Background)

The current "Statement of Work Agreement" between the U.S. Department of Energy (DOE) Office of Civilian Radioactive Waste Management (OCRWM), Management and Operating Contractor (M&O), and Metal Samples Company (Metal Samples), is TRW Environmental Safety Systems Purchase Orders A15414SSOB and A15382YS9B. The scope of Metal Samples' work, under the current statement of work, is to fabricate and provide metal specimens in accordance with the schedule included in the purchase orders.

1.2 Performance of the Audit

Staffs from the U.S. Nuclear Regulatory Commission (NRC), Division of Waste Management, and the Center for Nuclear Waste Regulatory Analyses (CNWRA) observed the M&O, Bechtel SAIC Company (BSC), audit BSC-SA-02-005 of activities regarding the implementation of Metal Samples' Quality Assurance (QA) Manual (QAM). This audit was conducted on November 26-28, 2001, at Metal Samples facilities in Munford, Alabama.

The purpose of this audit was to evaluate the effectiveness of the implementation of Alabama Specialty Products, Inc.'s QAM, and to determine if applicable requirements of the OCRWM QA Program Requirements and Description (QARD), Revision 10, were being met. The scope of the audit included evaluating the implementation of the Alabama Specialty Products, Inc.'s QAM, and any associated Operational Procedures and Work Instructions, as relating to various sample preparations.

The NRC observers' (hereafter observers) objective was to assess whether BSC QA, Product Quality Engineering/Supplier Audits and Evaluation Section, audit team (hereafter audit team) and Metal Samples were properly implementing the QA requirements contained in Subpart G, "Quality Assurance," to Part 60, of Title 10 of the U.S. Code of Federal Regulations (10 CFR Part 60) and the provisions contained in the QARD.

This report presents the observers' determination of the effectiveness of the BSC audit and whether Metal Samples implemented adequate QARD and QAM controls in the audited areas.

2.0 MANAGEMENT SUMMARY

Within the areas evaluated, the audit team identified several minor potential deficiencies. These deficiencies did not appear to impact the quality and technical adequacy of the Metal Samples products being supplied to BSC. The audit team identified three potential deficiencies in the areas of procurement, of control of measuring and testing equipment, and nonconformance control. The staff believes that this BSC audit was well-planned, thorough, and adequately evaluated Metal Samples' QA activities.

The observers determined that BSC Audit No. BSC-SA-02-005 was well-planned and effectively executed. The audit team members were independent of the activities they audited and were knowledgeable regarding the QA and technical disciplines within the scope of the audit. The audit team members' qualifications were reviewed and were found acceptable.

The audit team concluded that the QARD and QAM had been satisfactorily implemented in the areas evaluated. The potential deficiencies identified do not appear to have a significant potential to adversely affect the quality of the product. The observers agreed with the audit team's conclusions, findings, and recommendations presented at the audit exit. The staff will

continue to interface with OCRWM and follow the progress that Metal Samples is making to address the issues identified during this audit.

3.0 AUDIT PARTICIPANTS

3.1 Observers

Ted Carter	Team Leader	NRC
Tom Trbovich	QA Specialist	CNWRA

3.2 BSC Audit Team

Richard Maudlin	Audit Team Leader	BSC QA
Robert Habbe	Auditor	BSC QA

4.0 REVIEW OF THE AUDIT AND AUDITED ORGANIZATION

The BSC audit of the Metal Samples was conducted in accordance with OCRWM QAP 18.2, "Internal Audit Program," and QAP 16.1, "Management of Conditions Adverse to Quality." The NRC staff's observation was based on NRC Manual Chapter 2410, "Conduct of Observation Audits," dated July 12, 2000.

4.1 Scope of the Audit

The scope of the audit was to evaluate the effectiveness of the QA Program delineated in the TRW Environmental Safety Systems Purchase Orders A15414SS0B and A15382YS9B and evaluate the implementation of the Alabama Specialty Products, Inc., QAM, and associated operational procedures (OPs) and work instructions (WIs), as related to various sample preparations.

4.2 Conduct and Timing of the Audit

The audit was performed effectively and the audit team demonstrated a sound knowledge of the applicable Metal Samples program and procedures. The audit checklist was developed using the Purchase Orders, QARD, and the Metal Samples' QAM. Applicable procedures and WIs were reviewed and used during the audit. The audit team members conducted thorough interviews; they challenged responses when appropriate; and they effectively employed their audit checklist. The observers concluded that the timing of the audit was appropriate even though a stop-work order had been issued to Metal Samples, because of the initiation of a Nonconformance Report, Discrepancy Report (DR), and Corrective Action Report, identifying sample weld location and test report traceability problems. The audit team and the observers caucused at the end of each day. Meetings between the audit team and Metal Samples management, with the observers present, were held each morning, to discuss the current audit status and preliminary findings.

4.3 Audit Team Qualification and Independence

The qualifications of the audit team, based on previous reviews, were in accordance with the requirements of DOE Procedure QAP 18.1 "Auditor Qualification." The observers concluded that the audit team members had the necessary expertise to perform the audit and were qualified to audit the Metal Samples activities. The observers also concluded that the audit team members had sufficient authority and organizational freedom to make the audit process meaningful and effective.

4.4 Examination of the QA Elements

4.4.1 QA Program

The audit team determined that the OPs and WIs have been developed, approved by management, and are available to all staff by computer through a Local Area Network. The Metal Samples Compliance Director controls the implementation of the procedures into the system. Metal Samples personnel have a “read-only” capability. Job travelers are prepared for the various products and identify various manufacturing steps, indicate in-process as well as final inspections, and reference appropriate drawings, OPs, and WIs, as necessary. A review of selected personnel job descriptions indicated proper qualification and training for persons holding the positions.

The observers agreed with the audit team findings in this area.

4.4.2 Procurement Control

The combination of the following deficiencies were noted as a potential deficiency report (i.e., subject to concurrence by BSC QA management).

- a. Metal Samples does not keep archival copies of their Approved Suppliers List and no objective evidence could be provided to reflect that Carolina Commercial Heat Treating and Certified Measurements, Inc. were on the Approved Suppliers List for the procurement dates indicated.
- b. No objective evidence could be provided to reflect that the requisitioner had reviewed and approved ASPI purchase orders 52512, 46944, and 44585.
- c. Inadequate receipt inspection by Metal Samples in that some reports failed to identify the ASTM revisions and Metal Samples was unable to support that they had verified that revisions provided by Laboratory Testing, Inc were current revisions as required by the ASPI purchase order.

The observers agreed with the audit team findings in this area.

4.4.3 Identification and Control of Items and Materials

Job travelers specify when identification is applied to parts. A review of several products indicated identification either stamped physically on the part or on slips contained in the bags if parts were small. Two different C22 excess materials, identified as U237 and K932, were traced from the purchase order, receiving inspection report, shop traveler, and into storage, indicating traceability had been maintained. No discrepancies were noted with the implementation of OP 8.0-1, “Product Identification and Traceability,” and OP 7.0-1, “Control of Customer-Supplied Product.”

The observers agreed with the audit team findings in this area.

4.4.4 Inspection

Either the Receiving Clerk or Quality Control (QC) may perform receiving inspections, depending on purchase-order requirements. In-process inspections are performed by manufacturing operators. Final inspections are performed by QC personnel and a verification is performed to assure all previous inspections have been completed. The audit team reviewed several job travelers and inspection records. A potential discrepant condition was identified by the fact that some inspectors were completing the “no column” on the record, when the “N/A column” was the more accurate for review of inspection data provided by suppliers.

The observers agreed with the audit team findings in this area.

4.4.5 Control of Measuring and Test Equipment

The audit team reviewed several measuring items used for products supplied to BSC. A Radiographic Analyzer serial number 99-14 had a calibration sticker that indicated that it was past due for calibration. Two standards used to do a verification check on a surface profilometer had not been calibrated since their purchase in 1996 and 1997, even though the manufacturer's recommendation was for an annual calibration. Three gauge blocks had been replaced in a set, with no record of replacement being documented in the calibration history form. Only heavy-use pin gauges of a large set are being calibrated on an annual basis, with no documentation being included in the calibration history form. The company performing the calibration of the optical comparator was not audited nor on the approved supplier list at the time of the calibration. These minor deficiencies combined were noted as a potential deficiency report (i.e., subject to concurrence by BSC QA management).

The observers agreed with the audit team findings in this area.

4.4.6 Storage, Shipping, and Handling

The audit team reviewed the job travelers and stated that appropriate handling and protection requirements were noted. Packaging requirements for shipment were also observed. No discrepancies were noted in this area.

The observers agreed with the audit team findings in this area.

4.4.7 Inspection, Test, and Operating Status

A review of products at various fabrication stages indicated that products were identified by part markings and controlled by the job travelers, with definitive sequences. No discrepancies were noted in this area.

The observers agreed with the audit team findings in this area.

4.4.8 Nonconformance Control

Anomaly Reports had been initiated for discrepant products in accordance with OP 13.1-1, "Control of Nonconforming Product." Metal Samples did not prepare an Anomaly Report for an out of tolerance dimensional condition on samples provided on TRW Purchase Order A15414SS0B, Schedule FY00-05, MSC Job No. 176043. This was identified as a potential deficiency (i.e., subject to concurrence by BSC QA management).

The observers agreed with the audit team findings in this area.

5.0 NRC STAFF FINDINGS

The observers determined that Audit No. BSC-SA-02-005 was effective in determining the level of compliance of Metal Samples activities associated with sample fabrication. The observers agreed with the audit team's conclusion that the purchase orders, QARD, and Metal Samples quality program had been satisfactorily implemented, except for the identified potential discrepancies.

5.1 NRC Audit Exit Summary

The audit team discussed the potential discrepancies in the procurement controls, measuring and test equipment, and inspection elements during the audit exit meeting. Of particular interest was the fact that no discrepancies were noted with the controls established for procured or customer-supplied material and traceability. The audit team leader stated he would make recommendations to BSC management to have an annual audit performed at Metal Samples and have holdpoints established in the purchase orders for a review of Metal Samples' documentation, before sample shipment.

The NRC observers expressed appreciation for the excellent cooperation and responsiveness provided to them during their observation activities. In addition, the observers stated that they agreed with the audit team's findings and recommendations, as presented at the audit exit. The observers also stated that they will continue to interface with DOE and BSC and follow the progress that Metal Samples is making to address the issues identified during this audit.

5.2 NRC Audit Observer Inquiries

There were no Audit Observer Inquires written during this audit.